

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In Re Application of:**

**Brenda F. Baker, et al.**

**Confirmation No.: 5280**

**Application No.: 10/701,236**

**Group Art Unit: 1635**

**Filing Date: November 4, 2003**

**Examiner: Tracy Ann Vivlemore**

**For: SUGAR SURROGATE-CONTAINING OLIGOMERIC COMPOUNDS AND  
COMPOSITIONS FOR USE IN GENE MODULATION**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

- ☒ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:
- ☐ Certification in Accordance with § 1.97(e) is attached; or
- ☒ The fee of **\$180.00** as set forth in § 1.17(p) is attached.
- ☒ Copies of reference numbers 31-59 listed on the attached Form PTO-1449 are enclosed herewith.
- ☒ Copies of reference numbers 1-30 on the attached Form PTO 1449 are not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(ii).

The enclosed 1449 form includes Office Actions and cited references from related applications. For the Examiner's convenience, also enclosed herewith is a table listing related applications and Office Actions and rejections from those related applications. The enclosed 1449 form includes references from related applications that were the basis of a rejection under § 102 or § 103 and that were not previously made of record in the present application.

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.

Date: February 21, 2008

/Jane E. Inglese/  
Jane E. Inglese  
Registration No. 48,444

WOODCOCK WASHBURN LLP  
Cira Centre  
2929 Arch Street, 12th Floor  
Philadelphia, PA 19104-2891  
Telephone: (215) 568-3100  
Facsimile: (215) 568-3439

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	10/701,236
Filing Date	11-04-2003
First Named Inventor	Brenda F. Baker
Art Unit	1635
Examiner Name	Tracy Ann Vivlemore
Attorney Docket Number	ISIS-5207

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	1	U.S. 4,720,483	01-19-1988	Jansz et al.	
	2	U.S. 4,757,141	07-12-1988	Fung et al.	
	3	U.S. 5,082,934	01-21-1992	Saba et al.	
	4	U.S. 5,151,510	09-29-1992	Stec et al.	
	5	U.S. 5,424,413	06-13-1995	Hogan et al.	
	6	U.S. 5,506,212	04-09-1996	Hoke et al.	
	7	U.S. 5,561,043	10-01-1996	Cantor et al.	
	8	U.S. 5,631,148	05-20-1997	Urdea	
	9	U.S. 5,639,873	06-17-1997	Barascut et al.	
	10	U.S. 5,719,271	02-17-1998	Cook et al.	
	11	U.S. 5,760,202	06-02-1998	Cook et al.	
	12	U.S. 5,861,493	01-19-1999	Cook et al.	
	13	U.S. 5,891,684	04-06-1999	Usman et al.	
	14	U.S. 5,955,443	09-21-1999	Bennett et al.	
	15	U.S. 5,998,203	12-07-1999	Matulic-Adamic et al.	
	16	U.S. 6,133,246	10-17-2000	McKay et al.	
	17	U.S. 6,210,892 B1	04-03-2001	Bennett et al.	
	18	U.S. 6,222,025 B1	04-24-2001	Cook et al.	
	19	U.S. 6,262,036 B1	07-17-2001	Arnold, Jr. et al.	
	20	U.S. 6,274,723 B1	08-14-2001	Nilsen	
	21	U.S. 6,506,559 B1	01-14-2003	Fire et al.	
	22	U.S. 6,818,759 B2	11-16-2004	Beigelman et al.	
	23	U.S. 7,022,828 B2	04-04-2006	McSwiggen	
	24	U.S. 2003/0125241 A1	07-03-2003	Wissenbach et al.	
	25	U.S. 2003/0139585 A1	07-24-2003	Uhlmann et al.	
	26	U.S. 2003/0143732 A1	07-31-2003	Fosnaugh et al.	
	27	U.S. 2003/0206887 A1	11-06-2003	Morrissey et al.	
	28	U.S. 2004/0029275 A1	02-12-2004	Brown et al.	
	29	U.S. 2004/0146867 A1	07-29-2004	Slattum et al.	
	30	U.S. 2005/0142535 A1	06-30-2005	Damha et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	31	EP 0 266 168 A2	05-04-1988	Amoco Corp.		
	32	WO 94/02498 A1	02-03-1994	Worcester Foundation for Experimental Biology		
	33	WO 96/07392 A2	03-14-1996	Hybridon, Inc.		
	34	WO 02/44321 A2	06-06-2002	Max-Planck-Gesellschaft Wissenschaften E. V.		

Examiner  
SignatureDate  
Considered

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 3

**Complete if Known**

Application Number	10/701,236
Filing Date	11-04-2003
First Named Inventor	Brenda F. Baker
Art Unit	1635
Examiner Name	Tracy Ann Vivlemore
Attorney Docket Number	ISIS-5207

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	35	ALAHARI, <i>J. Pharmacology and Experimental Therapeutics</i> , 1998, 286, 419-428	
	36	BEIGELMAN, <i>J. Biol Chem</i> , 1995, 270, 25702-25708	
	37	BERGER, <i>Nucleic Acids Research</i> , 1998, 26, 2473-2480	
	38	BEVILACQUA, <i>Biochemistry</i> , 1996, 35, 9983-9994	
	39	BOUTLA, <i>Current Biology</i> , 2001, 11, 1776-1780	
	40	COOK, <i>Anti-Cancer Drug Design</i> , 1991, 6, 585-607	
	41	DAMHA, <i>J. Am. Chem. Soc.</i> , 120:12976-12977	
	42	ELBASHIR, <i>EMBO J.</i> , 2001, 20, 6877-6888	
	43	HAMMOND, <i>Nature</i> , 2001, 2, 110-119	
	44	KIMURA-HARADA, <i>FEBS Lett.</i> , 1971, 13, 335-338;	
	45	KOIZUMI, <i>Nucleic Acids Research</i> , 1989, 17, 7059-7071	
	46	KUIMELIS, <i>Nucleic Acids Res.</i> 1994, 22, 1429-1436	
	47	LESNIK, <i>Biochemistry</i> , 1995, 34, 10807-10815	
	48	PARRISH, <i>Molecular Cell</i> , 2000, 6, 1077-1087	
	49	PORTA, <i>Biotechnology</i> , 1995, 13, 161-164	

Examiner  
SignatureDate  
Considered

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/701,236
				Filing Date	11-04-2003
				First Named Inventor	Brenda F. Baker
				Art Unit	1635
				Examiner Name	Tracy Ann Vivlemore
Sheet	3	of	3	Attorney Docket Number	ISIS-5207

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	50	SHUMAN, <i>J. Biol Chem</i> , 1993, 268, 18943-18950	
	51	TOSQUELLAS, <i>Nucleic Acids Research</i> , 1998, 26, 2069-2074	
	52	TRACEWELL, <i>Toxicology and Applied Pharmacology</i> , 1995, 135, 179-184	
	53	TUSCHL, <i>Molecular Interventions</i> , 2002, 2, 158-167	
	54	VERONESE, <i>Il Farmaco</i> , 1999, 54, 497-516	
	55	WILDS, <i>Nucleic Acids Res.</i> , 2000, 28, 3625-3635	
	56	WU, <i>J. Biol. Chem</i> , 1998, 273, 2532-2542	
	57	YU, <i>RNA</i> , 1997, 324-331	
	58	YU, <i>Bioorganic and Medicinal Chemistry</i> , 1996, 4, 1685-1692	
	59	Table listing related applications and office actions and rejections from those related applications	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## REJECTIONS MADE IN OTHER APPLICATIONS

Application Number	Attorney Docket Number	Date of Official Action on the Merits	Rejections Levied in Official Action under 35 U.S.C. §§ 102 or 103	Other Rejections Levied in Official Action	Application Status
08/659,440	ISIS2197	January 13, 1997	§ 103 (a): Metelev, <i>Bioorg. Med. Chem. Lett.</i> 1994, 4:2929-2934; and Lengyel <i>Journal of Interferon Res.</i> , 1987, 7, 511	§ 112, first paragraph, enablement	Issued (US 5,898,031)
		July 22, 1997	§ 103(a): Strickland, <i>Science</i> 1988 241:680-684; Metelev, <i>Bioorg. Med. Chem. Lett.</i> 1994, 4:2929-2934; and Dagle, <i>Nucleic Acids Res.</i> 1991, 19, 1805-1810		
		January 28, 1998	Strickland, <i>Science</i> 1988 241:680-684; Metelev, <i>Bioorg. Med. Chem. Lett.</i> 1994, 4:2929-2934;		

			and Goodchild, Bioconjug. Chem. 1990 1:165-187			
08/870,608	ISIS2484	March 17, 1999	None	Obviousness-type double patenting: 08/659,440; § 112 first paragraph, enablement	Issued (US 6,107,094)	
		October 8, 1999	None	Obviousness-type double patenting: 08/659,440; § 112 first paragraph, enablement		
09/479,783	ISIS4313	May 1, 2003	§ 102 (b) PCT patent application no. WO 94/01550		Pending	
		December 24, 2003	§ 102 (b) PCT patent application no. WO 94/01550			
		May 18, 2004	(1) § 102 (b) U.S. patent no. 5,013,830; (2) § 102 (b) U.S. patent no. 5,256,775	(1) § 112, first paragraph, written description; (2) § 112, second paragraph indefiniteness		
		February 9, 2005	(1) § 102 (b) U.S. patent no. 5,013,830; (2) § 102 (b) U.S.	§ 112, first paragraph, written description		

		September 1, 2005	patent no. 5,256,775	(1) § 112, first paragraph, written description; (2) § 112, second paragraph indefiniteness	
			(1) § 102 (b) U.S. patent no. 5,013,830; (2) § 102 (b) or § 103(a) U.S. patent no. 5,256,775		
			(1) § 102 (b) U.S. patent no. 6,849,726; (2) § 103 (a) U.S. patent no. 6,849,726		
10/280,600	ISIS0002-104	February 21, 2007	§ 101, utility		Abandoned
		March 28, 2006		(1) § 112, first paragraph, written description; (2) § 112, second paragraph indefiniteness	
10/281,349	ISIS0002-105 (ISIS-5780)	June 30, 2006	(1) § 103 (a) U.S. patent no. 6,573,072; (2) § 103(a) U.S. patent no. 6,849,726	§ 112, second paragraph indefiniteness	Pending
		March 19, 2007	§ 103 (a) U.S. patent no. 6,573,072	Obviousness-type double patenting, U.S. patent no. 6,107,094	
10/281,312	ISIS0002-106 (ISIS-5779)	June 29, 2006	§ 102 (e) U.S. patent no. 6,573,072	§ 112, second paragraph	Pending



				indefiniteness	
10/281,297	ISIS0002-107 (ISIS-5778)	March 21, 2006	§ 102 (b) PCT patent application no. WO 94/01550		Pending
		September 22, 2006	(1) § 103 (a) U.S. patent no. 6,573,072; (2) § 103(a) U.S. patent no. 6,849,726		
		April 2, 2007	§ 103 (a) U.S. patent no. 6,573,072	Obviousness-type double patenting, U.S. patent no. 6,107,094	
10/078,949	ISIS5027	February 10, 2005	(1) § 102 (b) PCT patent application no. WO 94/01550; (2) § 103 (a) PCT patent application no. WO 94/01550 in view of Hunzinker and Leumann, <i>Nucleic Acid Analogues: Synthesis and Properties in Modern Synthetic Methods</i> , 1995, ed. Ernst and Leumann, pp. 331-417	§ 112, first paragraph, written description	Pending
		August 12, 2005		(1) § 112, second paragraph	

			June 23, 2006	(1) § 102 (e) U.S. patent no. 6,573,072; (2) §102 (e) U.S. patent no. 6,849,726; (3) § 103 (a) U.S. patent no. 6,573,072; (4) §103(a) U.S. patent no. 6,849,726; (5) § 103 (a) U.S. patent no. 6,573,072; (6) § 103 (a) U.S. patent no. 6,573,072 in view of U.S. patent no. 6,037,463; (7) §103(a) U.S. patent no. 6,849,726 in view of U.S. patent no. 6,037,463	indefiniteness; (2) § 112, first paragraph, written description	
10/371,526	ISIS0002-108		December 13, 2005	(1) § 102 (b) European patent no. EP 0 339 842;	(1) § 112, second paragraph indefiniteness;	Abandoned

			(2) § 103 (a) European patent no. EP 0 339 842 in view of Milligan, <i>J. Med. Chem.</i> , 1993, 36, 1923; PCT patent application no. WO 93/07883; and U.S. patent no. 5,898,031	(2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement	
10/860,455	CHEM0003US.P2 (ISIS-5480)	March 23, 2007	(1) § 102 (a) Tracewell, <i>Toxicology and Applied Pharmacology</i> , 1995, 135, 179-184; (2) § 102 (b) PCT patent application no. WO 94/01550	Obviousness-type double patenting, U.S. patent application no. 09/479,783	Pending
10/701,012	CHEM0004US.P1	May 8, 2006	(1) § 102 (e) U.S. patent application no. 2003/0139585; (2) § 102 (e) U.S. patent application no. 2004/0146867; (3) § 103 (a) U.S. patent application nos. 2003/0139585 and 2004/0146867 in view of U.S. patent nos.	(1) § 112, second paragraph indefiniteness; (2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement; (4) Obviousness- type double patenting, U.S.	Abandoned

10/700,884	CHEM0008US.P1 (ISIS-5317)	June 24, 2005	5,082,934 and 5,719,271 (1) § 102 (b) Parrish, <i>Molecular Cell</i> , 2000, 6, 1077- 1087; (2) § 102 (b) U.S. patent no. 5,891,684	patent application no. 10/606,510 Obviousness-type double patenting, U.S. patent application no. 10/700,884	Abandoned
		July 12, 2006	(1) § 102 (e) U.S. patent no. 6,222,025; (2) § 102 (b) Kimura-Harada, <i>FEBS Lett.</i> , 1971, 13, 335-338; (3) § 103 (a) U.S. patent no. 5,861,439 or U.S. patent no. 5,760,202 in view of U.S. patent no. 5,256,775, U.S. patent no. 5,466,786, and U.S. patent no. 4,720,483; (4) § 103 (a) U.S. patent no. 5,256,775, U.S. patent no. 5,466,786, Kuimelis, <i>Nucleic</i>	(1) 101, non- statutory subject matter; (2) Obviousness- type double patenting, U.S. patent no. 5,861,493 in view of U.S. patent no. 5,256,775, U.S. patent no. 5,466,786, Kuimelis, <i>Nucleic Acids Res.</i> 1994, 22, 1429-1436, and Martin, <i>Helvetica Chimica Acta</i> , 1995, 78, 486-504; (3) Obviousness- type double patenting, U.S. patent no. 6,222,025 in view of U.S.	

			<i>Acids Res.</i> 1994, 22, 1429-1436, and Martin, <i>Helvetica Chimica Acta</i> , 1995, 78, 486-504	<p>patent no. 5,256,775, U.S. patent no. 5,466,786, Kuimelis, <i>Nucleic Acids Res.</i> 1994, 22, 1429-1436, and Martin, <i>Helvetica Chimica Acta</i>, 1995, 78, 486-504;</p> <p>(4) Obviousness-type double patenting, U.S. patent no. 5,760,202 in view of U.S. patent no. 5,256,775, U.S. patent no. 5,466,786, Kuimelis, <i>Nucleic Acids Res.</i> 1994, 22, 1429-1436, and Martin, <i>Helvetica Chimica Acta</i>, 1995, 78, 486-504;</p>	
10/700,939	CHEM0012US.P1 (ISIS-5318)	May 25, 2006	(1) § 102 (b) U.S. patent no. 5,561,043; (2) § 102 (b) U.S. patent no. 5,424,413;	<p>(1) Claim of priority denied;</p> <p>(2) § 112, first paragraph, enablement</p>	Pending

				(3) § 102 (b) U.S. patent no. 6,274,723; (4) § 102 (b) Porta & Lizardi, <i>Biotechnology</i> , 1994, 13, 161-164		
10/701,316	ISIS5301		October 13, 2006	(1) § 102 (b) U.S. patent no. 5,998,203; (2) § 102 (b) PCT patent application no. WO 94/01550; (3) § 102 (b) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888	(1) Claim of priority denied; (2) § 112, first paragraph, enablement	Pending
			March 6, 2007		§ 112, first paragraph, written description	
			July 10, 2007	(1) § 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888 in view of Wilds, <i>Nucleic Acids Res.</i> , 2000, 28, 3625-3635 and Hammond, <i>Nature</i> , 2001, 2, 110-119; (2) § 103 (a) Elbashir, <i>EMBO J.</i> ,	(1) Claim of priority denied; (2) § 112, first paragraph, written description	

				2001, 20, 6877-6888 in view of Wilds, <i>Nucleic Acids Res.</i> , 2000, 28, 3625-3635, Hammond, <i>Nature</i> , 2001, 2, 110-119, and Veronese, II Farmaco, 1999, 54, 497-516; (3) § 103 (a) Tracewell, <i>Toxicology and Applied Pharmacology</i> , 1995, 135, 179-184 in view of Wilds, <i>Nucleic Acids Res.</i> , 2000, 28, 3625-3635		
10/700,689	ISIS5313		May 31, 2005	(1) § 102 (b) Parrish, <i>Molecular Cell</i> , 2000, 6, 1077-1087; (2) § 102 (a) U.S. patent no. 5,998,203	Obviousness-type double patenting, U.S. patent application no. 10/701,316	Pending
			November 29, 2005	(1) § 102 (b) Parrish, <i>Molecular Cell</i> , 2000, 6, 1077-1087; (2) § 103 (a)		

			<p>Parrish, <i>Molecular Cell</i>, 2000, 6, 1077-1087 in view of Elbashir, <i>EMBO J.</i>, 2001, 20 (23), 6877-6888, U.S. patent no. 5,955,443 and Hammond, <i>Nature</i>, 2001, 2, 110-119</p>	
	July 28, 2006	<p>(1) § 102 (b) Parrish, <i>Molecular Cell</i>, 2000, 6, 1077-1087; (2) § 103 (a) Parrish, <i>Molecular Cell</i>, 2000, 6, 1077-1087 in view of Elbashir, <i>EMBO J.</i>, 2001, 20 (23), 6877-6888, U.S. patent no. 5,955,443 and Hammond, <i>Nature</i>, 2001, 2, 110-119</p>	<p>(1) Claim of priority denied; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316; (3) § 112, second paragraph indefiniteness</p>	
	November 14, 2006	<p>(1) § 102 (b) Parrish, <i>Molecular Cell</i>, 2000, 6, 1077-1087; (2) § 103 (a) Parrish, <i>Molecular Cell</i>, 2000, 6, 1077-1087 in view of</p>	<p>(1) Claim of priority denied; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316</p>	



			Elbashir, <i>EMBO J.</i> , 2001, 20 (23), 6877-6888, U.S. patent no. 5,955,443 and Hammond, <i>Nature</i> , 2001, 2, 110-119; (3) § 102 (b) U.S. patent no. 5,998,203	
	September 18, 2007		<p>(1) § 102 (e) U.S. patent no. 7,022,828;</p> <p>(2) § 103 (a) Elbashir, <i>EMBO J.</i>, 2001, 20, 6877-6888 in view of Wilds, <i>Nucleic Acids Res.</i>, 2000, 28, 3625-3635, Parrish, <i>Molecular Cell</i>, 2000, 6, 1077-1087, Monia, <i>J Biol. Chem.</i>, 1993, 268, 14514-14522 and Hammond, <i>Nature Reviews Genetics</i>, 2001, 2, 110-119;</p> <p>(3) § 103 (a) Bevilacqua, <i>Biochemistry</i>, 1996, 35, 9983-9994 in view of Monia, <i>J</i></p>	<p>(1) § 112, first paragraph, written description;</p> <p>(2) Obviousness-type double patenting, U.S. patent application no. 10/701,316;</p> <p>(3) Obviousness-type double patenting, U.S. patent no. 6,107,094;</p> <p>(4) Obviousness-type double patenting, U.S. patent application no. 10/281,297;</p> <p>(5) Obviousness-type double patenting, U.S. patent application no. 10/078,949;</p>

			<i>Biol. Chem.</i> , 1993, 268, 14514-14522 and U.S. patent no. 5,631,148	(6) Obviousness-type double patenting, U.S. patent application no. 10/860,265; (7) Obviousness-type double patenting, U.S. patent application no. 10/701,007	
10/701,264	ISIS5314	10/05/06	(1) § 102 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888; (2) § 102 (b) PCT patent application no. WO 94/01550; (3) § 102 (b) Monia, <i>J Biol. Chem.</i> , 1993, 268, 14514-14522; (4) § 102 (b) Yu, <i>Bioorganic and Medicinal Chemistry</i> , 1996, 4, 1685-1692; (5) § 102 (b) PCT patent application no. WO 94/02498	(1) Claim of priority denied; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316; (3) Obviousness-type double patenting, U.S. patent application no. 10/701,265	Pending
			(1) § 102 (b) Shuman, <i>J. Biol Chem</i> , 1993, 268,	(1) Obviousness-type double patenting, U.S.	

			18943-18950; (2) § 103 (a) Beigelman, <i>J. Biol Chem</i> , 1995, 270, 25702-25708 in view of Koizumi, <i>Nucleic Acids Research</i> , 1989, 17, 7059-7071	patent application no. 10/701,265; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316; (3) Obviousness-type double patenting, U.S. patent application no. 09/479,783; (4) § 112, first paragraph, enablement	
		7/25/07	(1) § 102 (a) Bevilacqua, <i>Biochemistry</i> , 1996, 35, 9983-9994; (2) § 102 (a) Yu, <i>RNA</i> , 1997, 324-331; (3) § 103 (a) Beigelman, <i>J. Biol Chem</i> , 1995, 270, 25702-25708 in view of Koizumi, <i>Nucleic Acids Research</i> , 1989, 17, 7059-7071 and U.S. patent no.	(1) Obviousness-type double patenting, U.S. patent application no. 10/701,265; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316; (3) Obviousness-type double patenting, U.S. patent application no. 09/479,783; (4) § 112, second	

				5,151,510; (4) § 103 (a) Yu, <i>RNA</i> , 1997, 324-331 in view of U.S. patent no. 5,151,510	paragraph, indefiniteness	
11/054,848	ISIS5586	March 23, 2007		(1) § 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877- 6888, U.S. patent application no. 2003/014732, and U.S. patent application no. 2003/0206887 in view of U.S. patent no. 6,262,036, U.S. patent application no. 2005/0142535, and U.S. patent no. 6,133,246	(1) Obviousness- type double patenting, U.S. patent application no. 10/701,007; (2) Obviousness- type double patenting, U.S. patent application no. 10/860,265; (3) § 112, first paragraph, enablement	Pending
10/700,697	ISIS5312	September 21, 2006		(1) § 103 (a) U.S. patent no. 6,818,759 in view of U.S. patent no. 6,506,559; (2) § 103 (a) U.S. patent no. 6,506,559 in view of Alahari, <i>J.</i> <i>Pharmacology and</i> <i>Experimental</i> <i>Therapeutics</i> , 1998, 286, 419-428 and	(1) Claim of priority denied; (2) § 112, second paragraph, indefiniteness; (3) § 112, first paragraph, enablement; (4) § 112, first paragraph, written description;	Pending

			<p>U.S. patent application no. 2003/0125241</p>	<p>(5) Obviousness-type double patenting, U.S. patent application no. 10/701,007</p>	
	January 5, 2007		<p>(1) § 103 (a) U.S. patent no. 6,818,759 and U.S. patent no. 6,506,559;</p> <p>(2) § 103 (a) U.S. patent no. 6,506,559, Alahari, <i>J. Pharmacology and Experimental Therapeutics</i>, 1998, 286, 419-428 and U.S. patent application no. 2003/0125241;</p> <p>(3) § 102 (e) Tuschl, <i>Molecular Interventions</i>, 2002, 2, 158-167</p>	<p>(1) Claim of priority denied;</p> <p>(2) § 112, first paragraph, written description;</p> <p>(3) Obviousness-type double patenting, U.S. patent application no. 10/701,007</p>	
			<p>(1) § 102 (b) Cook, <i>Anti-Cancer Drug Design</i>, 1991, 6, 585-607;</p> <p>(2) § 103 (a) Crooke, <i>Biochemical Journal</i>, 1995, 312,</p>	<p>(1) Claim of priority denied;</p> <p>(2) § 112, second paragraph, indefiniteness</p>	

			599-608 in view of Berger, <i>Nucleic Acids Research</i> , 1998, 26, 2473-2480; (3) § 103 (a) Lesnik, <i>Biochemistry</i> , 1995, 34,10807-10815 in view of Berger, <i>Nucleic Acids Research</i> , 1998, 26, 2473-2480; (4) § 103 (a) Wu, <i>J. Biol. Chem</i> , 1998, 273, 2352-2542 in view of Cook, <i>Anti-Cancer Drug Design</i> , 1991, 6, 585-607		
10/700,920	ISIS5203	October 2, 2006	(1) § 102 (e) U.S. patent application no. 2004/0029275; (2) § 103 (a) U.S. patent application no. 2004/0029275 in view of U.S. patent no. 5,459,255; (3) § 103 (a) PCT patent application no. WO 94/01550 in	(1) Claim of priority denied; (2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement; (4) Obviousness-type double patenting, U.S. patent application	Abandoned

			view of U.S. patent no. 5,459,255	no. 10/561,618	
10/460,433	CHEM0003US (ISIS-5200)	February 15, 2006	(1) § 102 (b) PCT patent application no. WO 94/01550; (2) § 102 (e) U.S. patent application no. 2003/0143732; (3) § 102 (b) U.S. patent no. 6,210,892; (4) § 102 (b) PCT patent application no. WO 02/44321; (5) U.S. patent application no. 2003/0143732 in view of U.S. patent no. 6,210,892	no. 10/561,618  (1) § 112, second paragraph, indefiniteness; (2) § 101 statutory- type double patenting, U.S. patent application no. 10/700,688; (3) Obviousness- type double patenting, U.S. patent application no. 10/700,697; (4) Obviousness- type double patenting, U.S. patent application no. 10/700,930; (5) Obviousness- type double patenting, U.S. patent application no. 10/700,971; (6) Obviousness- type double patenting, U.S. patent application no. 10/701,217; (7) Obviousness-	Abandoned

					type double patenting, U.S. patent application no. 10/701,236; (8) Obviousness-type double patenting, U.S. patent application no. 10/701,265	
10/606,510	CHEM0004US	April 3, 2006	(1) §102 (e) U.S. patent application no. 2003/0139585; (2) §102 (e) U.S. patent application no. 2004/0146867; (3) §103 (a) U.S. patent application no. 2003/0139585 and U.S. patent application no. 2004/0146867 in view of U.S. patent no. 5,082,934 and U.S. patent no. 5,719,271	(1) § 112, second paragraph, indefiniteness; (2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement;	Abandoned	
10/701,285	CHEM0006US (ISIS-5240)	March 16, 2007		(1) § 112, first paragraph, written description; (2) § 101, utility and § 112, first paragraph,	Pending	



					enablement	
					(1) § 112, first paragraph, written description; (2) § 101, utility and § 112, first paragraph, enablement	
10/701,007	ISIS5325	August 30, 2007			(1) § 112, first paragraph, written description; (2) § 101, utility and § 112, first paragraph, enablement	Pending
		May 5, 2006		§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, and U.S. patent application no. 2003/0206887		
		October 19, 2006		§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, and U.S. patent application no. 2003/0206887		
		March 26, 2007		§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, U.S. patent application no.	(1) § 112, first paragraph, enablement; (2) Obviousness-type double patenting, U.S. patent application	

			2003/0206887, U.S. patent no. 6,262,036, U.S. patent application no. 2005/0142535, and U.S. patent no. 6,133,246	no. 10/860,265; (3) Obviousness-type double patenting, U.S. patent application no. 11/054,848	
		September 14, 2007	§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, U.S. patent application no. 2003/0206887, U.S. patent no. 6,262,036, U.S. patent application no. 2005/0142535, and U.S. patent no. 6,133,246	(1) Obviousness-type double patenting, U.S. patent application no. 10/860,265; (2) Obviousness-type double patenting, U.S. patent application no. 11/054,848	
10/860,265	ISIS5482	April 10, 2007	§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, U.S. patent application no. 2003/0206887, U.S. patent no. 6,262,036, U.S.	(1) § 112, first paragraph, enablement; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,007; (3) Obviousness-type double	Pending

				patent application no. 2005/0142535, and U.S. patent no. 6,133,246	patenting, U.S. patent application no. 11/054,848	
10/757,298	CHEM0001US	September 23, 2005		(1) § 102 (b) U.S. patent no. 4,757,141; (2) § 102 (b) European patent no. EP 0 266 168; (3) § 103 (a) PCT patent application no. WO 96/07392 in view of Tosquellas, <i>Nucleic Acids</i> <i>Research</i> , 1998, 26, 2069-2074; (4) § 103 (a) Boutla, <i>Current Biology</i> , 2001, 11, 1776- 1780 in view of PCT patent application no. WO 96/07392; (5) § 103 (a) Boutla, <i>Current Biology</i> , 2001, 11, 1776- 1780 and PCT patent application no. WO 96/07392 in view of Parrish,		Abandoned

			August 8, 2006	<i>Molecular Cell</i> , 2000, 6, 1077-1087		
				(1) § 103 (a) PCT patent application no. WO 96/07392 in view of Tosquellas, <i>Nucleic Acids Research</i> , 1998, 26, 2069-2074; (2) § 103 (a) Boutla, <i>Current Biology</i> , 2001, 11, 1776- 1780 in view of Tosquellas, <i>Nucleic Acids Research</i> , 1998, 26, 2069- 2074; (3) § 103 (a) Boutla, <i>Current Biology</i> , 2001, 11, 1776- 1780 and Tosquellas, <i>Nucleic Acids Research</i> , 1998, 26, 2069- 2074 in view of Parrish, <i>Molecular Cell</i> , 2000, 6, 1077- 1087		